

IN THE CLAIMS:

1. (Currently Amended) A pressure relief valve for flowing media, the pressure relief valve comprising:

a closing element having a settable closing force;

a handwheel;

5 a threaded sleeve ~~actuated~~ rotated by said handwheel to move axially for generating a variable closing force of the closing element;

a valve shaft extending within said threaded sleeve toward the handwheel and being connected to the closing element;

10 a connecting element transmitting the rotary movement of said handwheel to said threaded sleeve while not transmitting axial movement of said handwheel to said threaded sleeve for providing a lifting movement between said handwheel and said threaded sleeve, said valve shaft being connected to said handwheel such that said valve shaft follows said lifting movement of said handwheel.

2. (Original) A pressure relief valve in accordance with claim 1, wherein said connecting element comprises teeth.

3. (Original) A pressure relief valve in accordance with claim 1, wherein said handwheel has a cylindrical pin provided with external teeth, said cylindrical pin being connected to said valve shaft, and said threaded sleeve has internal teeth corresponding to said external teeth, said

external teeth and said internal teeth comprising said connecting element.

4. (Original) A pressure relief valve in accordance with claim 2, wherein said connecting element comprises external teeth provided on a cylindrical pin of said handwheel, and internal teeth on said threaded sleeve.

5. (Original) A pressure relief valve in accordance with claim 1, wherein said threaded sleeve has externally located helically extending grooves.

6. (Original) A pressure relief valve in accordance with claim 5, wherein said threaded sleeve is accommodated in a cylinder having projections on an inner side, said projections engaging grooves formed by threading of said threaded sleeve.

7. (Original) A pressure relief valve in accordance with claim 5, wherein said grooves have at least one section with a different pitch from other sections or a remaining section, said section with a different pitch progressively changing the closing force.

8. (Original) A pressure relief valve in accordance with claim 6, wherein said grooves have at least one section with a different pitch from other sections or a remaining section, said section with a different pitch progressively changing the closing force.

9. (Currently Amended) A pressure relief valve comprising:

a valve closing element;

a valve shaft connected to [[the]] said closing element;

a handwheel;

5 a sleeve connected to said handwheel for generating a variable closing force exerted on said valve closing element, said valve shaft extending within said sleeve toward said handwheel;

a connecting element transmitting a rotary movement of said handwheel to said sleeve  
10 for rotation of said sleeve upon rotation of said handwheel while not transmitting axial movement of said handwheel to said sleeve for allowing said handwheel to move axially relative

to said sleeve providing a lifting movement between said handwheel and said threaded sleeve, said valve shaft being connected to said handwheel such that said valve shaft follows the lifting movement of said handwheel.

10. (Original) A pressure relief valve in accordance with claim 9, wherein said connecting element comprises teeth.

11. (Original) A pressure relief valve in accordance with claim 9, wherein said handwheel has a cylindrical pin provided with external teeth, said cylindrical pin being connected to said valve shaft, and said threaded sleeve has internal teeth corresponding to said external teeth, said external teeth and said internal teeth comprising said connecting element.

12. (Original) A pressure relief valve in accordance with claim 10, wherein said connecting element comprises external teeth provided on a cylindrical pin of said handwheel, and internal teeth on said threaded sleeve.

13. (Original) A pressure relief valve in accordance with claim 9, wherein said sleeve has externally located helically extending grooves.

14. (Original) A pressure relief valve in accordance with claim 13, wherein said sleeve is accommodated in a cylinder having projections on an inner side, said projections engaging said grooves formed by threading of said sleeve.

15. (Original) A pressure relief valve in accordance with claim 13, wherein said grooves have at least one section with a different pitch from other sections or a remaining section, said section with a different pitch progressively changing the closing force.

16. (Original) A pressure relief valve in accordance with claim 14, wherein said grooves have at least one section with a different pitch from other sections or a remaining section, said section with a different pitch progressively changing the closing force.

17. (New) A pressure relief valve comprising:  
a support cylinder with a projection;

a valve closing element;

a valve shaft connected to said closing element;

5 a handwheel mounted for rotation relative to said support cylinder and for axial movement relative to said support cylinder;

a sleeve with a treaded region engaging said projection for axial movement of said sleeve upon rotational movement of said sleeve;

10 a connecting means for transmitting a rotary movement of said handwheel to said sleeve for rotation of said sleeve upon rotation of said handwheel while allowing said handwheel to move axially relative to said sleeve for allowing a lifting movement between said handwheel and said sleeve, said valve shaft being connected to said handwheel such that said valve shaft follows the axial lifting movement of said handwheel.

18. (New) A pressure relief valve in accordance with claim 17, wherein:

5 said connecting means comprises a cylindrical pin provided with external axially extending teeth, said cylindrical pin being connected to said valve shaft, and said threaded sleeve having internal teeth corresponding to said external teeth, said external teeth and said internal teeth comprising said connecting element.

19. (New) A pressure relief valve in accordance with claim 17, wherein said sleeve treaded region is located on an outer surface of said sleeve and comprises helically extending grooves.

20. (New) A pressure relief valve in accordance with claim 19, wherein said grooves have at least one section with a different pitch from other sections or a remaining section, said section with a different pitch progressively changing the closing force.